

IN THE DRAWINGS

The attached sheet of drawings includes changes to Fig. 10. This sheet, which includes Figs. 10-12, replaces the original sheet including Figs. 10-12.

Attachment: 1 Replacement Sheet.

REMARKS/ARGUMENTS

Favorable reconsideration of this application, in light off the present amendments and following discussion, is respectfully requested.

Claims 1-45 are pending. Claims 22, 23, 25, 26, 37, and 39 are amended. Support for the amendments to Claims 22, 23, 25, 26, 37, and 39 is self-evident. No new matter is added.

In the outstanding Office Action, Claims 1-45 were rejected under 35 U.S.C. § 112, second paragraph, as indefinite. Claims 1, 2, 4-6, 23-27, 36-40, 44, and 45 were rejected under 35 U.S.C. § 102(b) as anticipated by Metcalf (WO 98/42947). Claims 3, 8, 9, 12, 41, and 43 were rejected under 35 U.S.C. § 103(a) as obvious over Metcalf. Claims 7, 13, 14, 28-35, and 42 were rejected under 35 U.S.C. § 103(a) as obvious over Metcalf in view of Banker et al. (U.S. Patent No. 6,332,110, herein "Banker"). Claims 10 and 11 were rejected under 35 U.S.C. § 103(a) as obvious over Metcalf in view of Klementich (U.S. Patent No. 5,462,315). Claim 12 was rejected under 35 U.S.C. § 103(a) as obvious over Metcalf in view of Yamamoto et al. (U.S. Patent No. 5,419,595, herein "Yamamoto"). Claims 1-9, 13, 14, 16, 17, 23-27, and 36-45 were rejected under 35 U.S.C. § 103(a) as obvious over Verge et al. (WO 03/060370, herein "Verge") in view of Metcalf. Claims 10 and 11 were rejected under 35 U.S.C. § 103(a) as obvious over Verge, Metcalf, and Klementich. Claim 12 was rejected under 35 U.S.C. § 103(a) as obvious over Verge, Metcalf, and Yamamoto.

THE DRAWING OBJECTION HAS BEEN ADDRESSED

Regarding the objection to Fig. 10 for including an extraneous line, a replacement drawing is included herewith in a replacement drawing sheet. Accordingly, Applicants respectfully submit that the objection to the drawings is overcome.

THE REJECTIONS FOR INDEFINITENESS ARE OVERCOME

Regarding the rejection of Claim 1 for reciting that the second and third abutment surfaces have “substantially identical angles of inclination relative to a plane transverse to a longitudinal direction,” Applicants respectfully submit that, as shown in Figs. 3, 4, 10, and 11, these surface both define an angle (α_4). In other words, with respect to the vertical plane in these figures, the two surfaces define a substantially identical angle, i.e., the two surfaces are parallel to each other. Accordingly, Applicants respectfully submit that Claim 1 would be understood, in light of the specification and drawings, by a person of ordinary skill in the art and is therefore not indefinite.

Regarding the rejections of Claims 17, 21, and 25 as indefinite for reciting the word “substantially,” Applicants respectfully note that the term “substantially” is used in these claims in order to account for the possibility of minor, unintended defects produced during the manufacturing process. In other words, the word “substantially” is intended to account for the possibility that the surfaces recited in these claims are not perfect. Should the Examiner deem that further action is necessary regarding these features, the Examiner is invited to contact Applicants’ representative to discuss mutually acceptable language for these claims. However, in the claims as presently written, Applicants respectfully submit that a person of ordinary skill in the art would understand the meaning of the word “substantially” in reference to the other features recited in the claims, and Claims 17, 21, and 25 are not indefinite, and the rejection of these claims as indefinite should be withdrawn.

Regarding the rejections of Claims 22 and 26 in relation to the phrase “product of the smallest section of a common portion of the tubes” and the phrase “the efficiency,” Claims 22 and 26 are amended to clarify these features. Accordingly, Applicants respectfully submit that the rejections of Claims 22 and 26 as indefinite are overcome.

Regarding the rejections of Claims 23 and 25 for using the word “type,” Claims 23 and 25 are amended to remove the word “type.” Accordingly, Applicants respectfully submit that these rejections of Claims 23 and 25 are overcome.

The rejection of Claim 36 is overcome for the same reasons discussed above regarding the rejection of Claim 1 for reciting the word “identical” in relation to angles of inclination.

Regarding the rejections of Claims 37 and 39 for reciting “taken as a starting point,” these claims are amended for clarification to recite that the preceding features are “provided.” Accordingly, Applicants respectfully submit that the rejections of Claims 37 and 39 for reciting “taken as a starting point” are overcome.

Regarding the rejection of Claim 39 as lacking proper antecedent basis, Claim 39 is amended to recite “a third” rather than “the third.” Accordingly, the rejection of Claim 39 as lacking proper antecedent basis is overcome.

THE REJECTIONS UNDER 37 C.F.R. § 102 ARE OVERCOME

Regarding the rejection of Claims 1 and 36 as anticipated by Metcalf, that rejection is respectfully traversed by the present response.

Independent Claim 1 recites, in part:

- ii) a first annular lip having a first axial abutment surface and a first inner surface and delimited by said first outer surface over a portion of the axial length thereof, and
- iii) a second abutment surface; and
a second tubular element comprising
 - i) a female thread, matching the male thread and screwed thereto,
 - ii) a second annular lip having a third abutment surface resting against said second abutment surface, a second outer surface, arranged to face said first inner surface, and a second inner surface,
 - iii) a fourth axial abutment surface, and
 - iv) a third inner surface extending between said fourth axial abutment surface and said female thread and defining

with said second outer surface and fourth abutment surface an annular recess configured to receive said first lip,

wherein said second and third abutment surfaces are conical surfaces having substantially identical angles of inclination relative to a plane transverse to a longitudinal direction, selected so as to allow said second abutment surface to rest against said third abutment surface, **generating a first radial and sealing interference contact of one of said first inner and outer surfaces of the first lip against said second outer surface or said third inner surface respectively**, and such that, during a diametral expansion in a plastic deformation region subsequently carried out on the expandable tubular joint, said first outer surface and said third inner surface are forced locally to define a second sealing interference contact.

Accordingly, Claim 1 recites a second abutment surface. One non-limiting example of the second abutment surface is surface (SB2) in the figures of the present application. Additionally, Claim 1 recites a third abutment surface. One example of the claimed third abutment surface is identified by reference character (SB3).

The second and third abutment surfaces are conical surfaces. The second abutment surface rests against the third abutment surface. The second abutment surface generates a first radial and sealing interference contact of i) the first inner surface, or ii) the first outer surface of the first lip against the second outer surface or third inner surface, respectively.

In contrast, Metcalfe does not disclose such second and third abutment surfaces. Rather, as discussed in the previous response, a person of ordinary skill in the art would not consider the angled surfaces shown in Fig. 2 of Metcalfe to be “abutment surfaces” as this term is known in the art. Rather, as discussed in the previous response, the surfaces are too steeply angled to meet the meaning of the term “abutment surface.”

Furthermore, Metcalfe describes an extendable tubular structure with tubular elements that have elongated slots (holes). The slots are arranged to have a diamond shape after expansion, which forms a screen. Metcalfe then connects the expandable tubular structures with a connector that links the two expanded tubular elements. Accordingly, Metcalfe is unconcerned with sealing anything as recited in independent Claims 1 and 36. In this regard,

Applicants note that the recited second and third abutment surfaces are conical surfaces. The recited second and third abutment surfaces generate, when the second abutment surface rests against the third abutment surface, **first radial and sealing interference contact of one of said first inner and outer surfaces of the first lip against the second outer surface or the third inner surface, respectively**. Thus, the second and third abutment surfaces recited in Claims 1 and 36 provide radial interference contact in order to seal. Metcalf does not provide such radial interference contact and does not seal anything through abutment of a second abutment surface against a third abutment surface. In fact, as discussed above, Metcalf is concerned with providing a screen with diamond shaped holes and therefore, not only does Metcalf fail to disclose the above-noted features, it would not have been obvious to a person of ordinary skill in the art to modify Metcalf to include all of the features recited in either of independent Claims 1 or 36 inasmuch as Metcalf is completely unconcerned with sealing anything.

REJECTIONS UNDER 35 U.S.C. § 103(a) ARE OVERCOME

Regarding the rejection of Claims 1 and 36 as obvious over Verge in view of Metcalf, that rejection is respectfully traversed by the present response. The outstanding Office Action acknowledges that Verge fails to teach second and third abutment surfaces with conical surfaces having substantially identical inclinations relative to a plane transverse to the longitudinal direction so as to allow a sealing interference contact between ...¹

The outstanding Office Action relies on Metcalf for the above-noted feature.² However, as discussed above, Metcalf does not provide any sort of sealing via its inclined surfaces, and these surfaces do not correspond to the second and third abutment surfaces recited in either of independent Claims 1 or 36. Instead, as discussed above, there is no radial

¹ Outstanding Office Action, page 15.

² Id.

and sealing interference contact described in Metcalfe in relation to second and third abutment surfaces as recited in independent Claims 1 and 36. Rather, Metcalfe is entirely unconcerned with sealing and is instead concerned with providing expansion to create diamond shaped slots, i.e., a screen. Accordingly, not only do neither of Verge and Metcalfe disclose the second and third abutment surfaces recited in independent Claims 1 and 36, a person of ordinary skill in the art reading Metcalfe would not have had any apparent reason, at the time the claimed inventions were made, to reproduce the devices recited in Claims 1 and 36 by modifying Verge inasmuch as Metcalfe is entirely unconcerned with providing a seal.

Indeed, a person of ordinary skill in the art reading Verge would have had no apparent reason to look to Metcalfe inasmuch as the devices of Verge and Metcalfe are non-analogous to each other, and Metcalfe is non-analogous to the subject matter recited in independent Claims 1 and 36.

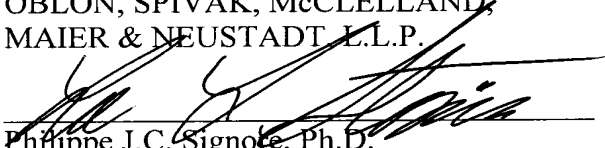
None of the remaining references remedies the deficiencies discussed above regarding Verge and Metcalfe. Accordingly, Applicants respectfully submit that independent Claims 1 and 36 and all of the claims depending therefrom patentably distinguish over any proper combination of the cited references.

For the foregoing reasons, it is respectfully submitted that this application is now in condition for allowance. A Notice of Allowance for Claims 1-45 is earnestly solicited.

Should Examiner Hewitt deem that any further action is necessary to place this application in even better form for allowance, he is encouraged to contact Applicants' undersigned representative at the below-listed telephone number.

Respectfully submitted,

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